

REMARKS

In order to advance the prosecution, a substitute specification has been submitted, the substitute specification has been editorially amended to conform the specification to U.S. patent practice. No new matter has been added. Additionally, claims 1, 7 and 12 have been amended to particularly point out and distinctly claim the invention. Claims 1-18 are pending in the application.

In view of the foregoing amendments and remarks, an early action on the merits is requested. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, the Examiner is invited to telephone the undersigned to arrange for such a conference.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment and a substitute specification is attached in clean form as well as a marked up version. The attached page is captioned "Version with markings to show changes made".

Respectfully submitted,
JACOBSON HOLMAN PLLC

By 

Yoon S. Ham
Reg. No. 45,307

400 Seventh Street, N.W.
Washington, D.C. 20004-2201
(202) 638-6666
Date: September 5, 2001
Atty. Docket: 11349/P66792US0

Version with markings to show changes made

In the Title:

Please amend the title as follows:

--SEMICONDUCTOR MEMORY DEVICE HAVING A PLUG CONTACTED TO A
CAPACITOR ELECTRODE AND METHOD FOR FABRICATING THE [SAME]
CAPACITOR--

In the Specification:

Attached hereto is a substitute specification in clean form and a marked up version. It is respectfully submitted that the substitute specification is in compliance with 37 CFR §1.125(b) and no new matter has been added.

In the Claims:

Please amend claims 1, 7 and 12 as follows:

1. (Amended) A semiconductor memory device, comprising:
a semiconductor substrate, [wherein] a gate electrode [is] formed on the semiconductor substrate, and [wherein] a plurality of source/drain junctions [are] formed in the semiconductor substrate;
an interlayer insulating layer formed over the semiconductor substrate;
a plug formed in the interlayer insulating layer, [wherein] the plug [comprises] includes a diffusion barrier layer and a

seed layer for [a] electro plating;

a lower electrode of a capacitor contacted to the seed layer;

a dielectric layer formed on the lower electrode; and
an upper electrode formed on the dielectric layer.

7. (Amended) A method for fabricating semiconductor memory device, comprising the steps of:

providing a semiconductor substrate, [wherein] forming a gate electrode [is formed] on the semiconductor substrate, and [wherein] forming a plurality of source/drain junctions [are formed] in the semiconductor substrate;

forming an interlayer insulating layer over the semiconductor substrate;

etching the interlayer insulating layer [to form] and forming a contact hole;

forming a plug in the contact hole, wherein the plug [comprises] includes a diffusion barrier layer and a seed layer for [a] electro plating;

forming a lower electrode of a capacitor contacted to the seed layer by using an electro plating technique;

forming a dielectric layer of the capacitor on the lower electrode; and

forming an upper electrode of the capacitor on the dielectric layer.

12. (Amended) A method for fabricating semiconductor memory device, comprising the steps of:

providing a semiconductor substrate, [wherein] forming a gate electrode [is formed] on the semiconductor substrate, and [wherein] forming a plurality of source/drain junctions [are formed] in the semiconductor substrate;

forming an interlayer insulating layer over the semiconductor substrate;

etching the interlayer insulating layer [to form] and forming a contact hole;

forming a plug in the contact hole, wherein the plug [comprises] includes a diffusion barrier layer and a seed layer for [a] electro plating;

forming a glue layer on the seed layer and the interlayer insulating layer;

forming a sacrificial layer on glue layer;

etching the sacrificial layer and the glue layer [to form] and forming an opening defining a region of a lower electrode of a capacitor;

forming the lower electrode on the seed layer in the

opening, by using an electro plating technique;

removing the sacrificial layer and the glue layer;

forming a dielectric layer of the capacitor on the lower electrode; and

forming an upper electrode of the capacitor on the dielectric layer.